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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,532	04/20/2004	Michael A. Jones	122748.00003US3	6215
34282	7590	04/06/2006	EXAMINER	
QUARLES & BRADY STREICH LANG, LLP ONE SOUTH CHURCH AVENUE SUITE 1700 TUCSON, AZ 85701-1621			LU, JIPING	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/828,532		JONES, MICHAEL A.	
	Examiner		Art Unit	
	Jiping Lu		3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 26 January 2006.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 20-36 is/are pending in the application.

4a) Of the above claim(s) 20-30 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 31-36 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, claims 31-36 in the reply filed on 8/5/2005 is acknowledged.
2. Claims 20-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/5/2005.

Specification

3. The disclosure is objected to because of the following informalities: applicant failed to correctly include a cross reference to the other reissue applications in the first sentence of the specification of each of the reissue applications. The first sentence added to the specification by amendment filed 4/20/2004 failed to identify each of the reissue applications and their relationship within the family of reissue applications, **and to the original patent**. (See MPEP 1451 (I)).

Appropriate correction is required.

Reissue Applications

4. Claims 31-36 are rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material which is not supported by the prior patent is as follows:

The claimed peripheral wall in the calcination zone “being substantially free of ceramic along part of said calcinations zone” is deemed to be new matter not supported by the originally filed specification. Nowhere in the specification does the applicant describe the improvement or utility of free of ceramic material in the peripheral wall of the calcination zone. The alleged support in the original specification col. 6, lines 19-27, failed to specify “the peripheral wall being substantially free of ceramic along part of said calcinations zone”.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 31-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed peripheral wall in the calcination zone “being substantially free of ceramic along part of said calcinations zone” is deemed to be new matter not supported by the originally filed specification. Nowhere in the specification does the applicant describe the improvement or utility of free of ceramic material in the peripheral wall of the calcination zone. The alleged support in the original specification col. 6, lines 19-27, failed to specify “the peripheral wall being substantially free of ceramic along part of said calcinations zone”. Therefore, col. 6, lines 19-27 is insufficient to show full support of the newly added limitations.

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7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 31-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claimed limitation of “being substantially free of ceramic along part of said calcinations zone” in claim 31 was a negative limitation that rendered the claims indefinite because it was an attempt to claim the invention by excluding what the inventors did not invent rather than distinctly and particularly pointing out what they did invent. In re Schechter, 205 F.2d 185.98 USPQ 144 (CCPA 1953). The specification fails to explain what materials other than ceramic may be used. Nowhere in the specification does the applicant describe the improvement or utility of free of ceramic material in the peripheral wall of the calcination zone.

Claim Rejections - 35 USC § 102/103

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 31-36 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Makris et al USP 5713734.

Claims are structurally met by the Makris et al. Makris et al disclose a calcination plant for a particulate material same as the applicant's. The plant also includes a calcination zone or cyclone separator 4 and means 2 for transporting particulate material through at least part of the calcinations zone along a substantially cyclone path. The peripheral wall at the calcinations zone of Makris et al. is free of ceramic. It is noted that Makris et al. do not expressly state in the specification that the ceramic is used. The claim is directed to an absence of an element, e.g. ceramic. Therefore, Makris patent does structurally read on the broad claim 31. Or in the alternative, it is deemed to be an obvious matter to reduce the use of ceramic along the peripheral wall of the cyclone separator in order to increase the heat conduction during heating and save cost as pointed out in the applicant's argument. . For claim 32, it is deemed to be inherent function of heating process. Whenever the rate of retention of the particulate materials being heated changes which will change the temperature in the calcinations zone. This is a natural phenomena. For claims 35 and 36, see burner 13.

12. Claims 31-36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishida et al (U. S. Pat. 3,881,862).

Nishida et al. disclose a calcination plant for a particulate material same as the applicant's. The plant also includes a calcination zone or cyclone separator 11 and means 2A-2D for transporting particulate material through at least part of the calcinations zone along a substantially cyclone path. The peripheral wall at the calcinations zone of Nishida et al. is free of ceramic. It is noted that Nishida et al do not expressly stated in the specification that the ceramic is used. The broad claim 31 is directed to an absence of an element, e.g. ceramic. Therefore, Nishida et al patent does structurally read on the broad claim 31. Or in the alternative, it is deemed to be an obvious matter to reduce the use of ceramic along the peripheral wall of the cyclone separator in order to increase the heat conduction during heating and save cost. For claim 32, it is deemed to be inherent function of heating process. Whenever the rate of retention of the particulate materials being heated changes which will change the temperature in the calcinations zone. This is a natural phenomenon. For claims 35 and 36, see burner 8.

Response to Arguments

13. Applicant's arguments filed 1/26/2006 have been fully considered but they are not persuasive to overcome the rejection. First broad claims fail to structurally define over the prior art references. Please point out from the claims if any structural limitations that the prior art references do not show or teach. Second, the applicant argued that the col. 6, lines 19-27 shows the support of the broad claim language in claim 31 "the peripheral wall being substantially free of ceramic along part of said calcinations zone". The examiner disagrees. The specification in col. 6, lines 19-27, simply is insufficient to show full support of the newly added limitations. Col. 6, lines 19-27 only mentions something about eliminating the needs of the refractory

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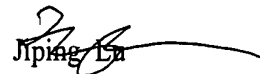
insulation. Col. 6 does not expressly or impliedly require "the peripheral wall being substantially free of ceramic along part of said calcinations zone". Therefore, this constitutes new matter not supported by the originally filed specification. Third, pages 5-6 of the Remarks, the applicant argued that it is not obvious to eliminate ceramic from the calcinations zone because of fear of structural damage. The examiner disagrees because it is well settled that to eliminate an element and its function is deemed to be obvious in absence of any new or unexpected result. In this case, it is clear to eliminate the ceramic along the calacination zone and its insulating function would have been obvious in order to increase the heat conduction during heating and save cost.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EHUD GARTENBERG can be reached on 571 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jiping Lu
Primary Examiner
Art Unit 3749

J. L.